

ASSESSMENT OF KNOWLEDGE OF MALNUTRITION AMONG MOTHERS OF UNDER-5 IN SABON GARI LGA, KADUNA STATE

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Abstract

This study was conducted to evaluate the Knowledge of malnutrition among mothers of under-5 in Sabon Gari LGA, Kaduna State. Descriptive survey research was used for this study. A sample size of 200 respondents from Sabon Gari LGA with a population of two hundred and eight thousand, eight hundred and ninety-five (208,895) were selected through two-stage sampling procedures of simple random and purposive sampling techniques. The research instrument was validated by 5 experts in the field of Health Education. The reliability points of 0.73 were gotten using the Cronbach alpha coefficient. All distributed questionnaires were analysed using descriptive statistics of frequency count, simple percentages, mean and one-sample t-test. The result of the study revealed that the knowledge of malnutrition among mothers of under-5 in Sabon Gari LGA, Kaduna State is not significant ($p < 0.05$). Based on the conclusion, it was recommended that Community-based health education and sensitization should be reinforced to provide mothers with proper nutrition and malnutrition education.

Keywords: Malnutrition, Knowledge, Mothers of Under-5.

Introduction

Children under the age of five are considered to be susceptible in many ways, particularly when it comes to health. Malnutrition has been a serious public health issue that has disproportionately affected children. Malnutrition according to the World Health Organisation (2022) refers to child energy and/or nutrient consumption being deficient, excessive, or unbalanced. Malnutrition encompasses undernutrition, micronutrient-related malnutrition, overweight, obesity, and diet-related non-communicable diseases. Approximately 149 million children below age five are thought to have weight lower for their age, resulting in stunted growth. There were 45 million wasted persons or people who were too small for their height, while 38.9 million were overweight or obese. Similarly, 45 per cent of mortality in children under the age of five is linked to malnutrition. The poorest and middle-income countries are the worst hit (WHO, 2022).

According to the Global Nutritional Report (2021), Overweight and stunted development are prevalent in Africa at 5.3 per cent and 30.7 per cent, respectively. Waste, on the other hand, affects 6.0 per cent of the African population. Nigeria has the world's second-largest burden of stunted children, with 32 per cent of children under-5 suffering from stunted growth across the country. Only two out of every ten children in Nigeria are now receiving treatment for malnutrition, although an estimated two million children are malnourished. (United Nations International Children Emergency Fund [UNICEF], 2021). Acute malnutrition is said to have killed 124 children out of 21,265 who were admitted. The government's help, on the other hand, significantly increased access to high-quality malnutrition treatment across the state, albeit more work still to be done (Kaduna State Primary Health Care Development Board [KADSPHCDB], (2020).

Malnutrition is characterized as an excessive or imbalanced absence of energy and nutrients in the diet. Undernutrition, overnutrition, and vitamin deficiency are some of the symptoms. Kalu and Etim (2018) affirmed that children who are malnourished are more likely to have the following health problem delayed

physical and mental development, inability to realize full physical and mental potential and so on. Mild malnutrition weakens every part of the immune system, and it is a key risk factor for the onset of active Tuberculosis. Protein and calorie malnutrition, as well as micronutrient deficiencies (Adamu et al., 2016). Nevertheless, Malnutrition symptoms include skin rashes, hair loss, weakened immune system, high risk of infections, digestive problems, night blindness, poor wound healing and so on (Mohammadinia et al., 2012). According to Dipasquale et al. (2020), acute malnutrition occurs from insufficient protein or calorie ingestion. Children with primary acute malnutrition are prominent in low- and middle-income countries. It is caused by a scarcity of food as a result of economic, political, and environmental factors. Secondary acute malnutrition develops as a result of abnormal nutrient loss, increased energy expenditure, or decreased food intake, and is most frequent in the context of chronic illnesses such as cystic fibrosis, chronic renal failure, chronic liver problems, and so on (Gorver & Ee, 2009; Dipasquale et al., 2015).

Furthermore, Obesity is one of the two results of malnutrition. Obesity in children is a weight-to-height ratio of more than three standard deviations. Obesity is common among children in underdeveloped nations, with a rate of increase that is more than 30% higher than in industrialized countries. Over Thirty-eight million children aged 0 to 5 years were reported to be overweight in 2019. Similarly, 39 million children under the age of five were overweight or obese in 2020 (WHO, 2021). Larger family sizes, mother illiteracy, poor monthly income, and father literacy are all attributed to malnutrition (Nath & Kanniammal, 2017). Aljohani and Aljohani (2020) however affirmed that low maternal education is the most significant risk factor. Because the mother is the one who is in charge of the child's care, mothers must be well-versed in the subject of child nutrition (Patali, 2018). Mothers with a better understanding of nutrition can raise their children in a healthier environment (Khattak et al., 2007). As a result, this study was carried out to assess the knowledge of malnutrition among mothers of children under the age of five in Sabon Gari LGA, Kaduna State.

Statement of the Problem

Children below the age of five in Nigeria confront a variety of significant issues, including endemic malnutrition. According to WHO (2022), the greatest severe threat to global public health is hunger and malnutrition. Malnutrition has been connected to many deaths among children under the age of five in most poor countries, including Nigeria. Malnutrition is responsible for 45 per cent of all fatalities in children under the age of five, either directly or indirectly. At the same time, childhood obesity and overweight are on the rise in these same countries. Malnutrition has significant and long-term developmental, economic, social, and medical effects for people, families, communities, and governments across the world. As a result, reducing malnutrition in children under the age of five remains a major concern in disadvantaged countries across the world (UNICEF, 2021). Furthermore, acute malnutrition claimed the lives of 124 children between the ages of 9 months and 9 years, resulting in the hospitalization of 21,265 additional children (KADSPHCDB, 2020). It's worth noting that malnutrition rates among Nigerian children under the age of five differ dramatically across rural and urban locations (Akombi et al., 2019). However, this study aimed at examining the knowledge of malnutrition among mothers of under-5 Sabon Gari LGA, Kaduna State.

Purpose of the Study

The purpose of this study was to assess the knowledge of malnutrition among mothers of under-5 in Sabon Gari LGA, Kaduna State.

Research Question

What is the knowledge of malnutrition among mothers of under-5 in Sabon Gari LGA, Kaduna State?

Research Hypothesis

H₀: The knowledge of malnutrition among mothers of under-5 in Sabon Gari LGA, Kaduna State is not significant.

Methodology

A descriptive survey research design was adopted for this study. The Population of the study comprised all mothers of children from birth to five (5) years of age in Sabon Gari LGA of Kaduna State, Nigeria. According to the Kaduna State Bureau of Statistics (KDBS) (2018), the projected total population of

females in Sabon Gari LGA by 2020 is approximately two hundred and eight thousand, eight hundred and ninety-five (208,895). A sample size of 200 was chosen to reflect the total population through a two-stage sampling procedure. The first stage was a simple random selection of 5 wards from Sabon Gari LGA. At the second stage, the purposive selection was used to select 40 households with a child aged 0-4 years from each of the wards selected. A close-ended researcher-structured questionnaire was used to gather information from mothers with children aged newborn to five (5) years in 5 wards in Sabon Gari LGA, Kaduna State. The instrument was validated by five professionals in the field of Health Education to elicit acceptable and correct responses as well as a range of viewpoints from the target demographic. The Cronbach alpha reliability coefficient with a value of 0.73 was used to assess the questionnaire's dependability. The researcher and five (5) trained research assistants administered the questionnaire. Two hundred (200) copies of the questionnaire were distributed to respondents at their respective wards until the study's samples were exhausted. The surveys were retrieved after completion to avoid any loss or missing copies. The data collected were analyzed using frequency, simple percentage, and mean, while the hypothesis was tested using inferential statistics of one sample t-test at a 0.05 level of significance.

Results

Research Question

What is the knowledge of malnutrition among mothers of under-5 in Sabon Gari LGA, Kaduna State?

Table 1: Distribution Showing Knowledge of malnutrition among mothers of under-5 in Sabon Gari LGA, Kaduna State.

S/N	Item	No	Yes	Mean
1.	Malnutrition is a lack of, excessive, or unbalanced nutrient taking in the diet.	41 (20.5%)	159 (79.5%)	1.80
2.	Malnourished children are open to infections	117 (58.5%)	83 (41.5%)	1.42
3.	Children who are malnourished face difficulties in their mental development.	161 (80.5%)	39 (19.5%)	1.20
4.	Malnutrition causes students to perform poorly in school.	147 (73.5%)	33 (26.5%)	1.27
5.	Malnutrition raises the likelihood of children mortality.	183 (91.5%)	17 (8.5%)	1.09
Average Mean				1.36

(Decision Mean- 1.5)

Table 1 revealed that the majority of respondents know that malnutrition is defined as a lack of, excessive, or imbalanced nutrient intake in the diet, as evidenced by 159. (79.5 per cent). This might be because of the symptoms displayed by malnourished children. Only 83 (41.5 per cent) of respondents agreed malnourished children are vulnerable to infections, while 117 (58.5 per cent) said no. Only 39 (19.5%) respondents said children who are malnourished commonly face difficulties in their mental development, whereas 161 (80.5%) said no. The table also shows that the majority of the respondents do not know that Malnutrition causes students to perform poorly in school as indicated by 147 (73.5%). The majority of the respondents 183% do not know that malnutrition raises the likelihood of childhood mortality. A careful observation of Table 1 shows the mean scores of the responses on the knowledge of malnutrition among mothers under-5 in Sabon Gari LGA, Kaduna State. The mean scores for each question were computed, and item 1 received the highest mean score of 1.80, showing that the majority of respondents understand that malnutrition is defined as a lack of, excessive, or imbalanced nutrient intake in the diet. Furthermore, the table shows that other items from the responses indicate a lack of understanding among the respondents due to very low mean scores. A total mean score of 1.36 was attained. This is less than the aggregate mean of 1.5. This implies that mothers of under-5 in Sabon Gari LGA, Kaduna State does not know about malnutrition.

Hypothesis

The knowledge of malnutrition among mothers of under-5 in Sabon Gari LGA, Kaduna State is not significant.

Table 2: One-Sample T-Test Analysis on knowledge of malnutrition among mothers of under-5 in Sabon Gari LGA, Kaduna State.

Variable	N	Mean	Std. Deviation	Df	t-value	P-value	Remark
Knowledge	200	1.35	0.31	199	61.32	.000	Significant
Test Mean	200	1.50	0.00				

Calculated p < 0.05, calculated t-value > 1.65 at df 199

A careful observation of Table 2 revealed that the respondents were not knowledgeable about malnutrition. This is because the calculated p-value of 0.000 is less than the 0.05 alpha level of significance and the calculated t-value of 61.32 is greater than the 1.65 critical t-value at 199 degrees of freedom (df). As a result, the null hypothesis, which stated that the knowledge of malnutrition among mothers of under-5 in Sabon Gari LGA, Kaduna State is not significant is hereby retained.

Discussion

According to the finding of this study, mothers of under-5 in Sabon Gari LGA of Kaduna State are not knowledgeable about malnutrition. The findings of this study are similar to those of Fadare et al. (2019), who revealed that current maternal educational attainment in rural Nigeria is insufficient to reinforce knowledge and give improved nutrition outcomes for children. Ansuya et al. (2018) study on the other hand revealed that mothers' knowledge on nutrition was limited. Thus, the nutritional status of their children will improve if mothers have enough understanding about malnutrition prevention. However, the finding of this study is contrary to the findings of Aljohani and Aljohani (2020) who discovered that there was an adequate degree of knowledge among mothers about child malnutrition; however, this knowledge should be strengthened, as there were gaps in some areas.

Conclusion

In Nigeria, mothers were largely unaware of malnutrition. However, a mother's understanding of food choices and feeding is necessary to guarantee that her children have a healthy diet. Additionally, the current level of maternal education is insufficient to reinforce knowledge and provide better nutrition outcomes for children. Increased awareness of malnutrition and its implications may encourage mothers of children under the age of five to adopt a positive attitude and implement appropriate behaviours aimed at minimizing malnutrition. The finding of this study revealed that mothers of children under the age of five in Sabon Gari LGA, Kaduna State, lacked knowledge about malnutrition.

Recommendations

Based on the findings, the study suggests that the government make efforts to ensure that basic knowledge of malnutrition is gained and that school food programs be revitalized in both public and private schools. Furthermore, community-based health education and sensitization should be strengthened to provide mothers with good nutrition and malnutrition knowledge. Finally, adult education via behavioural change communications would be an excellent way to reach out to impoverished and undereducated Nigerian women.

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